DOCUMENT RESUME

ED 183 524 SP 015 636

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TITLE An Analysis of Attrition in the Downstate Illinois Teaching Force, 1972-73 to 1977-78.
SPONS AGENCY Illinois State Board of Education, Springfield.
NOTE 74p.

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Beginning Teachers; *Career Change; Economic Factors; Elementary School Teachers; Enrollment Trends; *Faculty Mobility; Job Satisfaction; Performance Factors; Secondary School Teachers; Sex Differences; Teacher Attitudes; *Teacher Employment; *Teacher Persistence; *Trend Analysis
IDENTIFIERS *Illinois

ABSTRACT

The implications of departure of teachers from the work force are examined. Specifically questioned are the departure patterns of teachers with less than one year experience, departure patterns of teachers with twenty or more years of experience, and the relationships between the age and the experience of teachers. These questions make distinctions between the sex of teachers as well as among elementary, secondary and special education certification. Survey results are presented in tabular form accompanied by narrative analysis. An overview of teacher career patterns and departure is included and suggestions are made for further research. (JD)

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An Analysis of Attrition in the Downstate Illinois Teaching Force, 1972-73 to 1977-78

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Highlights

* While most beginning teachers are in their twenties, there is a constant supply of beginning teachers thirty years or older.

* In 1977-78, nearly 20 per cent of all beginning teachers were at least 30 years old.

* There is a steady drain of younger teachers out of the teaching work force. Within the first six years, 4 of 10 beginning teachers leave.

* With teachers of twenty years or more experience, the number of males have nearly doubled from 1972-3 to 1977-78.

* Many teachers retire in their late fifties.

* The relationships between age and experience as a teacher differ sharply by sex and by elementary or secondary certification.

* There is a steady return of new and re-entering teachers to the teacher work force.

* Many "come-and-go" characterize the careers of many teachers. However, these comings-and-goings are related to sex, age, and teaching certification.

* In general, there are at least four different teaching forces: female elementary, male elementary, female secondary, and male secondary.

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Introduction

There is perennial concern about the quantity and the quality of personnel in such a labor intensive human service enterprise as education. The numbers and effectiveness of teachers and school administrators, as well as other professionals in schools, have constituted the stuff of debates in legislatures, offices of governors, state boards of education, state departments of education, colleges of education, local boards of education, taxpayer associations, and parent-teacher organizations.

The current scene is witness to these debates. Many suggest that the quality of education has slipped because teachers and administrators are no longer fulfilling their roles in the schooling of children. Others worry about the issues of supply and demand of educational personnel. Some of these individuals prophesy a teacher shortage, while others see a surplus.

This report deals exclusively with issues of numbers. The question this report seeks to answer is:

> What are the implications of departure of teachers from the teaching work force?

This question has significance for two reasons.

First, two different versions exist concerning the careers of teachers. One interpretation argues that most teachers leave college in their early twenties and devote the next forty plus years to a career in education. Others amend this interpretation by suggesting major differences exist between male and female careers, with females "skipping" several years to bear and raise their children. After this period, the perception is that many of these females return to teaching.

In contrast to this view, research literature of the 1950's and 1960's presents a sharply different outline of teaching careers. Charters (1970) summarizes one of the two themes of this research when he writes:

> Only four in ten males and less than three in ten females remained to begin their fifth year in teaching (p. 6).

Nearly forty years of previous research demonstrated a sharp decline in the number of those who remained in teaching after the first five years. The second theme of the research, again summarized neatly by Charters, was that while leaving continued over the entire age distribution of teachers, rates of leaving and age of departure differed by sex. Those hazards which draw males and females from long-term careers in education, Charters indicates, are "qualitatively different" (p. 24). He summarizes:

> The forces most strongly implicated in male separation are likely to be economic in nature, while those shaping the mobility of females are mainly related to the culturally defined role of female and the cycle of life events associated with the role (p. 24).

These two perspectives (the popular and the research) suggest important differences in assumptions about the structure of the teaching force. In contrast to the popular image of teaching as a life-long career, research evidence contends that teaching is a life-long career choice of relatively few, that those who remain are a distinct minority, and that sex determines the courses of departure.

At least two trends of the 1970's suggest that earlier research and popular notions may be flawed. First, in states such as Illinois which are experiencing declining enrollments, aren't teachers remaining in their positions longer, aren't new or re-entering teachers discovering employment more difficult to find, and aren't fewer teachers retiring prior to age sixty-five? Many would argue that enrollment declines have reduced the transient nature of teachers.

A second trend would be the advent of more equal opportunities for women. Charters' summary in 1970 sounds sexist and out of tune with many of the changes in the roles of females which happened in the 1970's. Do the older role distinctions which produced "qualitatively different" hazards persist at the end of the decade? In what ways have changes in the culturally defined role of females affected female careers in teaching?

This brief paper explores some of these questions. It does so more with an eye to triggering more study than to resolving, once and for all time, these, and other questions. To deal with some of these issues Teacher Service Records for downstate Illinois teachers for the 1972-73 to 1977-78 school years were used. Information on the City of Chicago School District is not included. This six year span marked the beginning both of declining enrollments and of pressures for equal opportunity for females.

To deal with the implications of career patterns on the departure of teachers from the teaching work force, three specific questions are examined. They are:

(1) What are the departure patterns of teachers with limited experience (01 year)?

(2) What are the departure patterns of teachers with extensive experience (20 years or more)?

(3) What are the relationships between the age and the experience of teachers?

These questions make distinctions between the sex of teachers as well as among elementary, secondary and special education certification.

With the information provided on these questions, this report presents a fourth section which seeks to present an overview of teacher career patterns and departure. The final section of the report suggests several

research issues generated by this analysis as well as speculating about the implications of departures on debates about teacher supply and demand.

Departure Patterns of Teachers With Limited Experience

This section examines two related questions: (1) What are the age, sex, and certification of "beginning" teachers (01 years of experience) in downstate Illinois schools from 1972-73 to 1977-78? and (2) What is the departure rate by age, sex, and certification of "beginning" teachers from 1972-73 to 1977-78?

Table 1 displays the downstate teacher work force with one year of experience in 1972-3 through 1977-78. Teachers are grouped by age, sex, and teaching certification. The table divides age into four broad categories, e.g., 20-29; 30-39; 40-49; and 50 or more. At the bottom of the table totals are created by sex and by a grand total.

Examination of the table suggests several major points. First, the vast majority of beginning teachers are in the age category of 20 to 29. On average over eight of every ten teachers with one year of experience are in their twenties. Second, despite this preponderance of younger teachers, there is a constant supply of "beginning" teachers who are thirty or older. Third, the grand totals reflect that from 1972-3 to 1977-78 employment of teachers with one year of experience has decreased nearly 40 per cent (1972-3; 9, 018 to 1977-8; 5, 494). Fourth, the decline for males has been roughly 1,000 teachers, or 42 per cent of the 1972 total. Decline for females has been roughly 2,400 teachers, or 38 per cent of the 1972. These percentages suggest that male and female decline have been parallel, but that numerically many more women have have left the teacher work force. Fifth, declines have not been constant among teach-

TABLE 1

Downstate Teachers With One Year of Experience
By Age, Sex, Type and Year, 1972-1977

Age		Year 1972	1973	1974	1975	1976	1977
	Male	2318	2281	1969	1562	1205	1312
	Elementary	1184	1116	963	677	502	526
	Secondary	1021	1033	888	754	621	689
	Spec. Ed.	113	132	118	131	82	97
20-29	Female	5590	5280	5071	3664	2853	3257
	Elementary	3567	3195	3043	1928	1449	1699
	Secondary	1167	1050	1061	821	666	703
	Spec. Ed.	856	1035	967	915	738	855
	Total	7908	7561	7040	5226	4058	4569
	Male	218	177	184	155	126	160
	Elementary	85	66	83	51	44	70
	Secondary	118	104	88	87	74	74
	Spec. Ed.	15	7	13	17	8	16
30-39	Female	515	468	514	428	353	520
	Elementary	353	311	348	280	223	338
	Secondary	106	96	107	86	80	112
	Spec. Ed.	56	61	59	62	50	70
	Total	733	645	698	583	479	680

TABLE 1 (cont.)

Age		Year 1972	1973	1974	1975	1976	1977
	Male	43	44	36	25	8	28
	Elementary	17	20	18	7	5	9
	Secondary	22	23	17	18	2	18
	Spec. Ed.	4	1	1	0	1	1
40-49	Female	277	232	242	198	144	186
	Elementary	187	159	179	148	92	115
	Secondary	53	42	41	31	25	47
	Spec. Ed.	37	31	22	19	27	24
	Total	320	276	278	223	152	214
	Male	17	7	11	7	8	7
	Elementary	3	4	3	0	1	1
	Secondary	14	2	8	7	7	6
	Spec. Ed.	0	1	0	0	0	0
50 or more	Female	40	53	39	38	24	24
	Elementary	21	28	28	28	15	12
	Secondary	12	15	7	5	4	7
	Spec. Ed.	7	10	4	5	5	5
	Total	57	60	50	45	32	31
Male Total		2596	2509	2200	1749	1347	1507
Female Total		6422	6033	5866	4328	3374	3987
Grand Total		9018	8542	8066	6077	4721	5494
		1972	1973	1974	1975	1976	1977

ing specializations. An inspection of the age category of 20 to 29 indicates sharp declines in both elementary and secondary for both sexes, but relative stability in special education. For instance, in 1972 special education employed 969 teachers, some 12 per cent of all first year teachers. In 1977, there were 952 special education teachers employed, or 21 per cent of the total of first year teachers. Because of the sharp declines in elementary and secondary, although over the five year period their was a decline of 17 teachers hired in special education (1972 = 969 and 1977 = 952), special education employment resulted in a net percentage increase of 9 per cent of those beginning teachers hired (1972 = 12 per cent and 1977 = 21 per cent). Sixth, there is a sense of continuity in examining those age categories of 30-39, 40-49, and 50 or more. Summing all these categories for 1972, for instance, suggests these more mature individuals contributed 12 per cent of the beginning teachers. By 1977, however, these summed categories contributed 17 per cent of all beginning teachers -- a percentage gain of 5 per cent from 1972 to 1977. This analysis indicates the importance of teachers over 30 years of age -- particularly women in the 30-39 age category in all types of certifications -- for employment by school districts. Seventh, the decline in employment has not been uniform across the years. In 1977, there was an actual increase of nearly 800 teachers.

Hence, the information in Table 1 suggests the need for careful monitoring of the employment of "beginning" teachers in Illinois. This monitoring should include factors such as the change in demand between 1976 and 1977, the impact of stabilizing of funding for special education programs on teacher employment, and the emergence of "older" individuals as an increasing percentage of the work force. By 1977-78, nearly 20 per cent of all "beginning" teachers were at least 30 years old.

With some sense now of the numbers of beginning teachers, our interest turned to their departure rates over time. Our initial examination involved those in the 20 to 29 age category, by far the largest group of "beginning" teachers.

Four tables were created which traced the careers of beginning teachers (Tables 1A to 4A, Appendix A). These tables each created an "artificial" group of individuals who begin teaching in 1972-73, had one year of experience, but were of a different age, e.g., 22 versus 23 versus 24 versus 25. Each group was then traced over the next five years using age and experience as indicators. Hence, those in 1972-3 who were age 23 and had 1 year of experience were followed into 1973-74 as age 24 and 2 years of experience, into 1974-75 as age 25 and 3 years of experience, and so on (Table 2A).

The results of these four tables are summarized as Table 2. The average decline is nearly 4 of every 10 beginning teachers. With each succeeding school year, the numbers in the age categories decline. These findings parallel Charters' summary of earlier research, with one noticable distinction. The differences by sex in Illinois are the reverse of early findings -- more female Illinois teachers leave by their fifth year than do their male counterparts.

To validate these results, another table was created which looked at all individuals ages 20 to 29 in 1972-73 (Table 5A, Appendix A). This large artificial group was again traced by age and sex to 1977-78. The percentage declines are as follows: males, 28.6 per cent; females, 42.4 per cent; average, 38.4 per cent. These percentages are congruent with those displayed in Table 2.

TABLE 2

Percentage Declines from 1972-73 to 1977-78 of Beginning Teachers for Selected Ages by Sex*

		Males		Females		Total	
	1972 1977	%	N	%	N	%	N
Ages	22 to 27	28.9	(64)	45.3	(525)	42.7	(589)
	23 to 28	35.9	(271)	49.1	(1158)	45.9	(1429)
	24 to 29	22.5	(119)	40.2	(373)	33.8	(492)
	25 to 30	23.3	(65)	38.5	(181)	32.3	(246)
Average Percentage Decline		27.4		43.3		38.7	

* Based on Tables 1A to 4A.

Finally, another table was created which examined all first year teachers from 1972-3 to 1977-78 regardless of age (Table 6A, Appendix A). The percentage declines for this table are as follows: males, 28 per cent; females, 34.7 per cent; average, 32.8 per cent. There is an important difference in this table. The female decline percentage is much less than in any of the previous five tables. One interpretation of this difference would be that older females who begin teaching are less likely to leave, although overall three of every ten females leave by their sixth year of teaching.

We are now prepared to answer the first question: what is the departure rate of beginning teachers? Quite simply, the rate is on the order of three of every ten males and four of every ten females. These figures suggest two issues of importance. First, these figures point to a good deal of "turbulence" during the first six years of teaching. How many teachers, for example, self-select themselves out of teaching to other careers as opposed to peers who are victims of reductions in force (RIF) but earnestly wish to find a teaching position. Of particular interest are those who had four or five years of teaching experience but who did leave teaching. The determination of mechanisms which shape the early years of teaching, say from the first to the fifth, and which influence the choice of teaching as a career deserve scrutiny.

Second, there is a steady drain of younger teachers out of the work force. If these rates were to continue unchecked, Illinois would seem to be losing all its younger teachers. But even as those in their twenties leave, those in their thirties, forties and fifties begin. There is a fairly constant number, and a growing percentage of the work force, who are older individuals who appear as beginning teachers. We know far too little

about the career intentions of this mature group of "beginning" teachers either to make predictions or to suggest the shapes of needed public policies. Are these individuals (many are women in their thirties) interested in short-term teaching situations or more permanent employees seeking a career?

Departure Patterns of Teachers with Extensive Experience

While the first section dealt with teachers with one year of experience, this second section examines those with twenty or more years of experience. Our interests focus on two major issues: (1) how many downstate teachers have twenty years of experience? and, (2) what are their departure rates?

Table 3 displays the numbers of downstate teachers with twenty or more years. (Complete information is found in Tables 1B to 6B, Appendix B.) An inspection of the table suggests several interesting points. First, from 1972-3 to 1977-8 the total of all teachers in this category has increased slightly (+428). Second, the distribution of males and females, however, has changed markedly. The numbers of males have increased sharply (nearly 50 per cent over 1972-3), while the number of females has declined (13 per cent below 1972-3). These changes have altered the ratio of males to females to the point that four of every ten in 1977-8 are males whereas in 1972-3 three in ten were male. Third, the age categories suggest that much of the total gain has occurred in those less than 54, while losses have occurred in those from 60 to 64. Apparently, retirements of those in their sixties have outstripped replacements.

Table 4 examines the sex and teaching certification of experienced teachers. The major finding of the table is that while six of every ten

TABLE 3

Downstate Teachers with Twenty Years or More of Experience,
Age 40 or More,
1972-3 to 1977-78

	Years						Change from 1972-1977	
Age	1972	1973	1974	1975	1976	1977	Number	Percent
40-44	413	427	451	510	701	900	+ 487	+118.0%
45-49	1593	1632	1733	1851	2006	2130	+ 537	+ 33.7%
50-54	2124	2225	2332	2398	2529	2719	+ 595	+ 28.0%
55-59	2713	2612	2469	2610	2648	2699	- 14	- .5%
60-64	2491	2110	1939	1833	1744	1662	- 829	- 33.0%
65+	624	485	407	349	300	276	- 348	- 55.8%
Total	9958	9491	9331	9441	9928	10386	+ 428	+ 4.3%
Male Total	2793	2870	2995	3298	3716	4155	+1362	+ 48.8%
Female Total	7165	6621	6336	6253	6212	6231	- 934	- 13.0%

TABLE 4

Percentage Distribution By
Teaching Certification and
Sex, Age 40 or More, 1972-3 to 1977-8

	Male			Female		
Year	Elem.	Second.	Spec. Ed.	Elem.	Second.	Spec. Ed.
1972-3	32.9	66.0	1.2	81.0	15.7	3.2
1973-4	33.0	65.7	1.3	79.7	16.8	3.5
1974-5	34.0	64.6	1.4	78.6	17.4	4.0
1975-6	34.2	64.1	1.7	77.2	18.4	4.5
1977-8	34.3	63.7	1.9	76.4	18.6	5.0
Average	33.8	64.7	1.5	78.5	17.5	4.1

males teach secondary students, nearly eight of every ten females teach elementary students.

Finally, Table 5 examines age distributions by sex. Once again there are sharp differences between males and females. Males of fifty-four or less represent nearly 70 per cent while females of fifty-five or more represent nearly 61 per cent of their respective categories. However, these averages seem to mask a growing number of males in the 40 to 54 category (+10 per cent from 1972-3 to 1977-8), and a declining percentage of both sexes in the 55 or more age category (-10 per cent).

Tables 3, 4, and 5 suggest relative stability in terms of size, but shifts in the age and sex of experienced teachers. Generally, male teachers now are a larger portion of this work force, work with secondary students, and appear to be "leaving" teaching at age fifty-five. In contrast, the total number of females decreased, most work in elementary schools, and the majority are 55 or more years of age. It seems reasonable to speculate, then, that many males have earned 30 years toward retirement by age 55 while few females have reached this level. Males may then opt to leave teaching, seeking employment in other occupations where they may gain other retirement benefits. (We shall provide some additional evidence on this issue in later sections.)

Thus far, we have examined inexperienced and extensively experienced teachers. Table 6 suggests that these two groups constitute about two of every ten teachers in downstate Illinois. In the next section our attention turns to the remaining eight of ten downstate Illinois teachers.

The Middle Years for Teachers

As we have seen, eight of every ten downstate teachers have between two and nineteen years of teaching experience. We attempted to explore

TABLE 5

Number and Percent of Teachers of Ages 40-54 and 55 or More, 1972-3 to 1977-78

MALES

Years	Ages 40-54	55 or more	Total
1972-3	1730 (61.9%)	1063 (38.1%)	2793
1973-4	1907 (66.4%)	963 (33.6%)	3870
1974-5	2084 (69.6%)	911 (30.4%)	2995
1975-6	2288 (69.4%)	1010 (30.6%)	3298
1976-7	2627 (70.7%)	1089 (29.3%)	3716
1977-8	2988 (71.9%)	1167 (28.1%)	4155
Average percent	68.3	31.7	

FEMALES

Years	Ages 40-54	55 or more	Total
1972-3	2400 (33.5%)	4765 (66.5%)	7165
1973-4	2377 (35.9%)	4244 (64.1%)	6621
1974-5	2432 (38.4%)	3904 (61.6%)	6336
1975-6	2471 (39.5%)	3782 (60.5%)	6253
1976-7	2609 (42.0%)	3603 (58.0%)	6212
1977-8	2761 (44.3%)	3470 (55.7%)	6231
Average percent	38.9	61.1	

TABLE 6

One Year Experience and Twenty or More Years Experience
Teachers as Percent of Downstate Illinois
Teaching Force, 1972-3 to 1977-78

Year	Downstate Teachers*	One Year**		Twenty or More Years***		Total
		N	%	N	%	%
1972-3	79, 423	9018	11.4	9958	12.5	23.9
1973-4	79, 838	8542	10.7	9491	11.9	22.6
1974-5	80, 665	8066	10.0	9331	11.6	21.6
1975-6	80, 032	6077	7.6	9551	11.9	19.5
1976-7	77, 211	4721	6.1	9928	12.9	19.0
1977-8	76, 272	5494	7.2	10386	13.6	20.8

* Department of Planning, Research, and Evaluation. Update: Illinois Teacher Supply and Demand, 1977-78. Springfield: Illinois Office of Education, Fall, 1978, page 26. This information does not include special education teachers.

** Table 1.

*** Table 4.

the departure rates of these teachers in two ways. First, a number of tables were created which traced various age and experience groups from 1972-3 to 1977-8 (Tables 1C to 15C, Appendix C). Second, correlations were run between age and experience.

Table 7 summarizes Tables 1C to 15C. Each of these individual tables was created by selecting a certain age in 1972-3, e.g., 25 years, by selecting an initial number of years of experience, e.g., 3, and then tracing the numbers of males and females for this "artificial" group from 1972-3 to 1977-8, e.g., 25 years to 30 years of age and 3 to 8 years of experience. (This was the technique used for tracing beginning teachers.)

The results of Tables 1C to 15C were mixed. On the one hand, the extremely small numbers generated by many of the artificial groupings were disappointing. On the other hand, these groupings provided some "feel" for the rapid decline of teachers early in their careers, the relative stability of those in their forties, and the high loss of teachers in their mid-fifties.

But this overview seemed too fragile to be of much use. Another way to get at career patterns and departure rates is to seek relationships between age and experience. These relationships could be of three kinds. First, the relationships could be highly positive (+.4 to +1.0) indicating that as teachers increase in age, their experience also increases. Second, the relationship could be so mixed as to be random (-.4 to +.4). Third, the relationships could be negative (-.4 to -1.0) indicating that as teacher age increases, teacher experience decreases. The exact value of the relationship is influenced by the number of cases examined.

Table 8 displays how correlations would be calculated to determine relationship between age and experience for teachers age 45 in 1977-8. First, the numbers of teachers with certain years of experience were ar-

TABLE 7

Summary of Artificial Groups Created with Selected Years of Experience, 1972-3 to 1977-8

Age	Experience	Sex	Number	Percent Decline, 1972-1977	Table
25-30	3-8	M	516	31.8	1C
			946	56.5	
30-35	5-10	M	141	33.5	2C
		F	153	23.1	
35-40	5-10	M	25	21.9	3C
		F	75	+ 5.6	
35-40	10-15	M	71	19.3	4C
		F	60	16.6	
40-45	10-15	M	31	0	5C
		F	34	0	
40-45	15-20	M	69	8.0	6C
		F	34	5.5	
45-50	10-15	M	7	50.0	7C
		F	48	5.8	
45-50	15-20	M	21	8.7	8C
		F	51	3.7	
45-50	20-25	M	41	0	9C
		F	22	4.3	
50-55	20-25	M	23	0	10C
		F	25	7.4	
50-55	20-30	M	16	15.8	11C
		F	17	10.5	

TABLE 7 (cont.)

Age	Experience	Sex	1977-8 Number	Percent Decline, 1972-1977	Table
55-60	25-30	M	5	54.5	12C
		F	24	27.3	
55-60	30-35	M	5	0	13C
		F	11	42.1	
60-65	30-35	M	0	100	14C
		F	2	90	
60-65	35-40	M	0	100	15C
		F	1	93.8	

TABLE 8

Display of Relation Between Age
and Experience for Age 45, 1977-78

Years of Experience	MALE		FEMALE	
	Elementary	Secondary	Elementary	Secondary
01	0	0	8	1
02	0	0	15	5
03	1	0	11	4
04	1	2	32	4
05	2	4	41	6
06	2	1	33	9
07	4	5	32	2
08	4	4	40	6
09	6	9	45	10
10	5	8	45	8
11	8	7	44	11
12	7	4	42	4
13	10	8	37	10
14	8	13	37	7
15	7	24	27	5
16	10	24	40	9
17	15	29	28	4
18	20	50	26	9
19	24	55	19	6
20	25	44	21	12
21	19	35	20	4
22	4	23	21	8
23	8	13	26	10
24	1	3	16	3
25	0	0	4	0
26	0	0	1	0
Correlation Between Age and Experience	.56*	.60*	- .34	.32
Number of pairs	22		26	
Degrees of freedom	20		24	
* Significant at .05 for two-tailed test	.423		.388	

rayed. Second, the years of experience, e.g., 3 years of experience, was paired to the number, e.g., 1 male elementary teacher. Third, these pairs were then analyzed using the Pearson product moment coefficient of correlation. Finally, these obtained correlations were compared to a .05 level of statistical significance.

Table 8 displays the fact that all obtained correlations for males were statistically significant. That is, the relationship of age and experience for males exceeded expectations based on chance. Neither of the correlations for females, however, exceeded the significance level of .05, although both exceeded the .10 significance level. In contrast to males, there appears to be "little" relationship between age and experience for females.

The magnitude of differences between females and males, and among the four categories is of interest. While male elementary and secondary teachers display a positive relationship, female elementary teachers display a negative relationship (significant at the .10 level). Female secondary teachers display a lower correlation, albeit positive, than male teachers.

Table 9 displays correlations between selected ages and years of experience for 1977-78 for elementary and secondary teachers. The small numbers of special education teachers so weakened possible correlations that they are not calculated.

Each of the categories presents different perspectives on teaching careers. First, male elementary teachers display a strong positive correlation from their mid-thirties to their mid-fifties. At the beginning and ending of their careers, age and experience do not seem to correlate. Second, male secondary teachers reflect much the same pattern, but the correlations are generally more significant and persist into the late fifties.

TABLE 9

Correlations Between Age and Years
of Experience for Selected Ages, 1977-78

	Age						
	29	34	39	44	49	54	59
Male							
Elem	.26	.76***	.58**	.47**	.47**	.44**	.17
df	7	12	14	22	25	23	25
Sec	.25	.61**	.66***	.59***	.57***	.58***	.38**
df	7	12	17	19	23	24	29
Female							
Elem	.32	.27	-.15	-.20	-.33*	-.05	.03
df	7	13	18	22	29	31	35
Sec	.40	.35	.14	.37*	.44**	-.06	-.02
df	7	13	17	21	26	29	28

* .10 level of significance for two-tailed test

** .05 level of significance for two-tailed test

*** .01 level of significance for two-tailed test

df = degrees of freedom calculated by number of pairs minus two

Third, female elementary teachers present a pattern of no relationship between age and experience, generally. However, at age 49 the correlation is negative and significant at the .10 level. In other words, as age increases, experience declines. One could suggest that the elementary female work force consists of many who leave and then re-enter teaching, many who enter teaching at a mature age, and some who enter teaching early and remain. The low, and frequently negative correlations, suggest a different career pattern (or patterns) for female elementary teachers than either males or female secondary teachers generally. Fourth, secondary female teachers show strong positive correlations in their forties, no relationships in their fifties, and mixed relationships in their thirties.

Tables 7 and 9 provide some senses to what the middle years of teaching are. In summary, they are a period in which a good many people leave the field. These departures are concentrated in the period prior to age forty and after age fifty-five. Equally, these departures are influenced not only by age but also by sex and by teaching certification. Males generally seem to stay in both elementary and secondary teaching positions while females display some relationships in secondary education but negative relationships in elementary education. The only major differences in these patterns are the very early years, and the eldest elementary teacher groups. We may speculate that many male elementary teachers chose "early retirement" at age fifty-five. For female elementary teachers departures are "matched" (in fact generally exceeded) by re-entering or beginning teachers of the same age but lesser experience. Table 8, for instance, shows female elementary teachers (age 45) cluster in numbers of 25 or more at the following years of experience: 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 23. The table also shows

that while 16 teachers have 24 years of experience, 8 have one year of experience. These female elementary teachers stand in sharp contrast to the male secondary teachers displayed in Table 8. For males, there is a "single" cluster extending from 14 to 23 years of experience, and representing the bulk of individuals in this category.

Hence, the middle years are a period of comings and goings. These entrances and exits are influenced deeply by sex, by age, and by teaching certification. Equally, these middle year teachers make up eighty percent of the work force.

An Overview of Career Patterns and Departure

As we turn to a more synoptic view of career patterns and departure, one final question must be dealt with. Is it not the case that in recent years the mobility of inexperienced teachers has dropped? Haven't beginning teachers tried harder to remain in the teaching force?

Table 10 presents summary information on beginning, younger teacher rates of departure. Using once again the technique of creating artificial groups, we examined groups of those who were 22 years of age and had one year of experience from 1973-77, 1974-77, (Table 1D to 3D, Appendix D).

With the exception of females in 1975-77, the rates of decline are about what could be expected from earlier analyses. It does not appear to be the case, then, that marked changes have occurred in the rates of departure of beginning, younger teachers. (Calculating rates for "older" beginning teachers presents major problems, e.g., at what age should such calculations begin?)

What all our information points to is the continued and steady departure of teachers from the teaching force -- and the steady return of

TABLE 10

Summary of Departure Percentage for One Year Experience Teachers, Age 22, Selected Years

Years	Ages	Years of Experience	Percent Decline Males	Females	Table
1973-77	22-26	1-5	23.3	28.5	1D
1974-77	22-25	1-4	28.7	25.8	2D
1975-77	22-24	1-3	20.9	10.1	3D

teachers to the teaching force. Figure 1 displays the approximate decline of "original" beginning teachers over time. The sharpest declines occur for females and males in the first ten years or so of teaching. By about age thirty, three of every ten beginning males and four of every ten beginning females have departed. By age forty, seven of every ten original males and females have departed . By age fifty, only one male and one female teacher of the original ten remain. At age fifty-five many males leave.

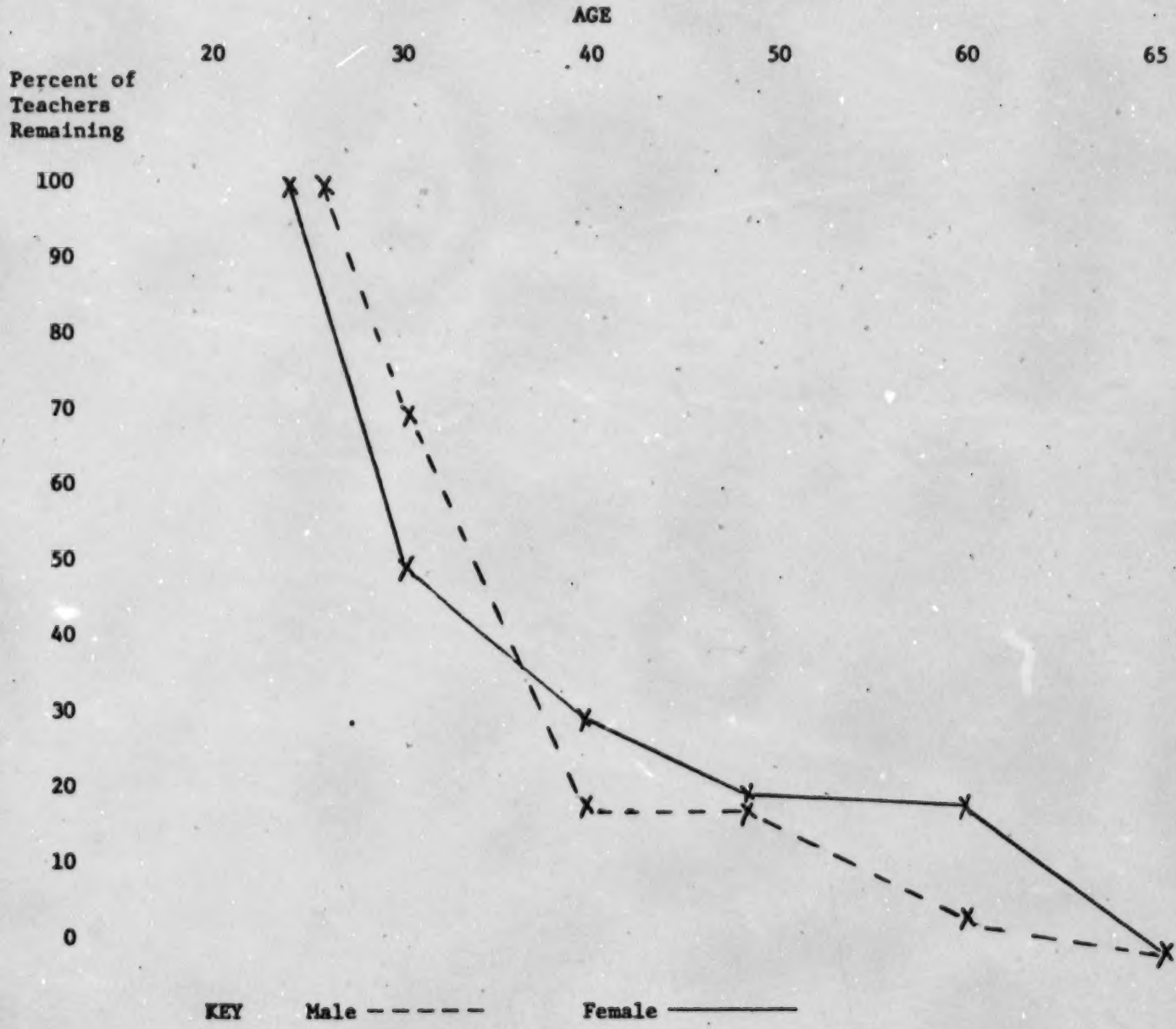
Against this stark picture of departure stands the image of a constant flow of replacement teachers. Many of these are re-entering teaching, having left for such reasons as bearing and raising children, trying other occupations, or obtaining more schooling, while many are beginning teaching for the first time. Hence, while Figure 1 demonstrates a constant loss of teachers over the years, while men and women leave teaching in staggering numbers, they also return in staggering numbers.

This general picture, nonetheless, needs refinement along two dimensions -- sex and teaching certification. In general, we should consider four different teaching forces. They are: male elementary, female elementary, male secondary, and female secondary. (The numbers of special education teachers preclude such generalizations at this point in time.)

The male elementary teaching force loses three of ten original teachers in the first ten years, but then shows a persistent of relationships between age and experience (Table 9). Such a pattern would indicate that replacements (re-entry or beginning) occur less frequently in this category than in some others. The female elementary force loses four of ten teachers in the first ten years, but then shows a consistent lack (or negative) relationship between age and experience. The comings and

Figure 1

Approximate Decline in Teaching Force
for Males and Females



goings are such that by age forty-nine the negative correlation indicates that the years of experience decline with age, e.g., there are more inexperienced than experienced teachers. Male secondary teachers leave teaching at slightly below three of every ten in the early years, but show the highest positive correlations between age and experience. By their forties, male secondary teachers indicate high, positive relationships which mean that fewer replacements are occurring in this category. Finally, female secondary teachers display losses on the order of four in ten in their early years, a weak but positive correlation between age and experience in their thirties, but high and positive relations between age and experience in their forties. Finally, in their fifties or slightly negative relationship develops. Such a mix of correlations suggests an early period of exit and entry, a period of linkage of age and experience in their forties, and some return and higher departure rates in their fifties.

These complex relations are masked by any single analysis of the total teaching force. We could now suggest that the largest numbers of replacements takes place in the female elementary teaching force in the age categories of thirty-five to fifty. We can also suggest that the fewest numbers of replacements occurs in the male secondary teaching force.

Hence, the departure rates of teachers continues in the late 1970's at much the same rates indicated by Charters. Equally, there are distinctive male and female patterns, as well as different patterns for teaching certifications. These factors suggest that analyses of teacher departure and replacement must look closely at four (and as special education increases, six) different teaching forces in downstate Illinois.

An Interpretative Summary

In this concluding section, several findings (closely linked to data from earlier sections) and several speculations (generated from seeking to make larger sense of these data) are presented.

If there is any finding which dominates this report, it is that in all ages, sex, and teaching certification categories there are constant comings-and-goings. The teaching force seems to be constantly attracting and losing members. But these comings-and-goings are far from random. Knowing sex, age, and teaching certification permits increased accuracy in terms of forecasting movements in and out of teaching.

This finding suggests that Charters' concept of "hazards" to a career in teaching continues in an era of declining enrollments, reductions in force, and fewer teacher graduates. What we need to examine further, however, is whether reductions in force constitute a significant new hazard to a teaching career. Do RIF's impact in any way the traditional economic and life cycle "pulls" from teaching? Just what are the consequences of involuntary departure on the ambitions and aspirations of potential life-long career teachers?

These comings-and-goings raise severe doubts about concerns over "aging" of the teaching force. These data suggest eight of every ten downstate teachers have less than twenty years experience. Before rushing to conclusions about the increasing age and experience of teachers, we would be well served to examine data about specific districts. This information bears heavily on considerations of district in-service training programs (Burlingame, 1978).

These comings-and-goings suggest also that much of the current discussion about teacher supply and demand needs refinement. At a minimum

this report suggests that we must monitor supply and demand for four different teaching forces. We need to examine the production, employment of, and potential pool of beginning and re-entry teachers by sex and by teaching certification. It seems clear, for instance, that we must have a large and active pool to replace exiting female elementary teachers. But what of the pool required for male secondary teachers -- it seems to bear no resemblance to that "needed" for female elementary teachers. (We must again note that special education may well provide two additional work forces.)

These comings-and-goings imply a geographical dimension not examined in this report. We seem to know too little about the distribution of these four teaching forces to be emphatic about either teacher surplus or teacher shortage. We need to link knowledge of the make-up of these labor pools to their geographic distributions.

Finally, these comings-and-goings may indicate that administrators in schools face heavy burdens teaching new or re-entry teachers the "ways of doing things" in their schools. Administrators must, first, recruit these teachers; second, teach them the ways of the school; third, develop patterns of coordination and cooperation between newer and older teachers; and, lastly, resolve possible conflicts between "newer" and "veteran" teachers (McNeil and Thompson, p. 634). Such administrative tasks may be common to "all" new teachers, or different for categories such as younger inexperienced teachers, younger re-entry teachers, maturer inexperienced teachers or maturer re-entry teachers. Such speculations also may bear heavily on the needs of in-service training programs.

Turning to another issue, we know far too little about the characteristics of beginning but more mature teachers and re-entry teachers. What

forces "pull" them either to teaching or back to teaching? How long do they stay in the teaching force? What factors account for either exiting from teaching to other occupations or leaving teaching but seeking re-entry later? Such investigations are certainly justified because this group of teachers is an important segment of the downstate Illinois teaching force.

In the same vein, few who have worked to "professionali e" education will not be pleased by the high and relatively constant losses experienced by new teachers, the steady drain of the middle years, and the high numbers leaving at age fifty-five. The concept of a life-long commitment to education seems tempered by other priorities related to the need to generate higher incomes or the overriding priority of rearing children. We may need to spend time thinking in more data-bound fashion about what the notion of a "career" as a "professional" educator means. It may well be that an education professional is a "comer-and-goer."

Such speculations about professionals could be turned another way. It may be that teachers are susceptible to "burn-out" -- the loss of professional vitality and interest due to extreme client demand. Teachers may require longer "breaks" than summer vacation to replenish their psychic and physical energy. We may be severely underestimating the "costs" of being a teacher. (In this line of reasoning, the interest in subject matter on the part of secondary teachers would help rejuvenate their lagging energy levels.)

All in all, these findings and speculations suggest that we must be modest -- perhaps unduly so -- about generalized claims about the downstate Illinois teaching force. We do know that teachers seem to quickly come and to quickly go. We know that four (or six) different teaching

work forces do exist. We do know that much of the teaching work force consists of a "pool" of mature but beginning teachers and re-entry teachers. But many of the mechanisms which drive this active (if not hyperactive) system cannot be examined by numbers alone. And the entire gamut of questions related to teacher quality and effectiveness await other, and well deserved, investigations.

Footnote References

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APPENDICES

Appendix A

TABLE 1A

Group Created With One Year Experience, Age 22, 1972-1977

Experience	1	2	3	4	5	6		
Age	22	23	24	25	26	27	N decline	% decline
Year	1972	1973	1974	1975	1976	1977	1972-77	
Category								
Male	221	221	205	190	175	157	64	28.9
Elementary	110	108	100	92	85	72		
Secondary	97	94	87	83	74	70		
Spec. Ed.	14	19	18	15	16	15		
Female	1159	1178	1012	877	749	634	525	45.3
Elementary	723	741	652	564	479	403		
Secondary	223	209	173	151	129	107		
Spec. Ed.	213	228	187	162	141	124		
Total	1380	1399	1217	1067	924	791	589	42.7

TABLE 2A

Group Created With One Year Experience, Age 23, 1972-1977

Experience	1	2	3	4	5	6	N	%
Age	23	24	25	26	27	28	decline	decline
Year	1972	1973	1974	1975	1976	1977	1972-77	
Category								
Male	754	705	645	603	541	483	271	35.9
Elementary	398	370	337	312	273	233		
Secondary	330	299	276	262	242	222		
Spec. Ed.	26	36	32	29	26	28		
Female	2355	2162	1875	1630	1410	1197	1158	49.1
Elementary	1516	1412	1238	1090	949	803		
Secondary	465	391	326	284	239	202		
Spec. Ed.	374	359	311	256	222	192		
Total	3109	2867	2520	2233	1951	1680	1429	45.9

TABLE 3A

Group Created With One Year Experience, Age 24, 1972-1977

Experience	1	2	3	4	5	6	N	%
Age	24	25	26	27	28	29	decline	decline
Year	1972	1973	1974	1975	1976	1977	1972-77	
Category								
Male	529	524	487	464	435	410	119	22.5
Elementary	277	270	239	225	215	200		
Secondary	226	226	222	215	197	187		
Spec. Ed.	26	28	26	24	23	23		
Female	928	916	808	732	619	555	373	40.2
Elementary	609	615	548	487	408	352		
Secondary	199	177	149	139	119	113		
Spec. Ed.	120	124	111	106	92	90		
Total	1457	1440	1295	1196	1054	965	492	33.8

TABLE 4A

Group Created With One Year Experience, Age 25, 1972-1977

Experience	1	2	3	4	5	6	N	%
Age	25	26	27	28	29	30	decline	decline
Year	1972	1973	1974	1975	1976	1977	1972-77	
Category								
Male	291	311	289	272	248	226	65	22.3
Elementary	153	162	144	135	126	105		
Secondary	125	131	126	122	108	106		
Spec. Ed.	13	18	19	15	14	15		
Female	470	426	384	347	322	289	181	38.5
Elementary	300	266	241	227	211	186		
Secondary	112	91	79	66	58	55		
Spec. Ed.	58	69	64	54	53	48		
Total	761	737	673	619	570	515	246	32.3

TABLE 5A

Group Created With One Year Experience, Age 20 to 29, 1972-1977

Year	1972-3	1973-4	1974-5	1975-6	1976-7	1977-78		
Experience	1	2	3	4	5	6	Decline from 1972 to 1977	
Age Category	20-29	20-31	22-31	23-32	24-33	25-34	Number	Percent
Male	2318	2221	2111	1995	1825	1656	662	28.6
Elem	1184	1162	1052	985	902	784	397	33.5
Secondary	1021	919	933	898	817	769	254	24.9
Spec. Ed.	113	140	126	112	106	105	8	7.1
Female	5590	5358	4751	4228	3670	3219	2371	42.4
Elem	3567	3442	3097	2775	2414	2086	1481	41.5
Secondary	1167	1033	884	778	666	598	569	48.8
Spec. Ed.	856	883	770	675	590	535	321	37.5
Totals	7908	7579	6862	6223	5495	4875	3033	38.4

TABLE 6A

Group Created With One Year Experience, All Ages, 1972-1977

Year	1972-3	1973-4	1974-5	1975-6	1976-7	1977-78		
Experience	1	2	3	4	5	6	Decline from 1972 to 1977	
All Ages							Number	Percent
Male	2599	2564	2363	2280	2046	1871	728	28.0
Elem	1292	1268	1151	1070	980	862		
Secondary	1175	1135	1070	1035	945	890		
Spec. Ed.	132	161	142	125	121	119		
Female	6422	6285	5694	5195	4634	4195	2227	34.7
Elem	4128	4079	3750	3446	3104	2787		
Secondary	1338	1212	1064	961	838	772		
Spec. Ed.	956	994	880	788	692	636		
Totals for All Ages	9021	8849	8057	7425	6680	6066	2955	32.8
Totals for 20-29 Age Categories	7908	7579	6862	6223	5495	4875	3033	38.4
Difference Between 20-29 and All Ages	1113	1270	1195	1202	1185	1191	78	5.6

Appendix B

Table 1B

Downstate Teachers with Twenty Years or More of Experience
by Sex, Age, and Teaching Specialization, 1972-73

	Male			Female			
Age	Elem	Sec	Spec Ed	Elem	Sec	Spec Ed	Totals
40-44	40	81	1	202	74	15	413
45-49	287	597	10	477	196	26	1593
50-54	226	483	5	1120	240	50	2124
55-59	194	396	9	1731	312	71	2713
60-64	136	231	7	1806	251	60	2491
65 +	35	54	1	469	55	10	624
Total	918(32.9%)	1842(66%)	33(1.2%)	5805(81%)	1128 (15.7%)	232 (3.2%)	

Male Total 2793 (28%) Female Total 7165 (72%)

Grand Total 9958

Table 2B

Downstate Teachers with Twenty Years or More of Experience
by Sex, Age, and Teaching Specialization, 1973-74

Age	Elem	Sec	Spec Ed	Elem	Sec	Spec Ed	Totals
40-44	48	93	2	196	72	16	427
45-49	294	590	17	492	208	31	1632
50-54	266	590	7	1049	260	53	2225
55-59	197	386	5	1627	329	68	2612
60-64	115	189	6	1532	213	55	2110
65 +	27	37	1	379	32	9	485
Total	947(33%)	1885(65.7%)	38 (1.3%)	5275 (79.7%)	1114 (16.8%)	232 (3.5%)	

Male Total 2870 (30.2%) Female Total 6621 (69.8%)

Grand Total 9491

Table 3B

Downstate Teachers with Twenty Years or More of Experience
by Sex, Age, and Teaching Specialization, 1974-75

	Male			Female			
Age	Elem	Sec	Spec Ed	Elem	Sec	Spec Ed	Total
40-44	56	107	4	197	67	20	451
45-49	294	603	15	568	220	33	1733
50-54	338	654	13	1002	267	58	2332
55-59	192	345	3	1546	311	72	2469
60-64	115	196	5	1358	204	61	1939
65 +	25	29	1	310	33	9	407
Total	1020 (34%)	1934 (64.6%)	41 (1.4%)	4981 (78.6%)	1102 (17.4%)	253 (4%)	

Male Total 2995 (32%)

Female Total 6336 (68%)

Grand Total 9331

Table 4B

Downstate Teachers with Twenty Years or More of Experience
by Sex, Age, and Teaching Specialization, 1975-76

	Male			Female			
Age	Elem	Sec	Spec Ed	Elem	Sec	Spec Ed	Total
40-44	61	127	5	223	74	20	510
45-49	335	614	21	607	228	46	1851
50-54	388	716	21	952	262	59	2398
55-59	209	436	5	1555	339	66	2610
60-64	112	195	3	1273	194	56	1833
65 +	24	24	2	259	30	10	349
Total	1129 (34.2%)	2112 (64%)	57 (1.7%)	4869 (77.9%)	1127 (18%)	257 (4.1%)	
	Male Total	3298 (34.5%)		Female Total	6253 (65.5%)		

Grand Total 9551

Table 5B

Downstate Teachers with Twenty Years or More of Experience
by Sex, Age, and Teaching Specialization, 1976-77

	Male			Female			
Age	Elem	Sec	Spec Ed	Elem	Sec	Spec Ed	Total
40-44	112	207	5	273	81	23	701
45-49	361	674	23	655	240	53	2006
50-54	439	785	21	907	319	58	2529
55-59	243	490	6	1545	295	69	2648
60-64	106	196	7	1192	180	63	1744
65 +	11	29	1	222	25	12	300
Total	1272 (34.2%)	2381 (64.1%)	63 (1.7%)	4794 (77.2%)	1140 (18.4%)	278 (4.5%)	
	Male Total	3716 (37.4%)		Female Total	6212 (62.6%)		

Grand Total 9928

Table 6B

Downstate Teachers with Twenty Years or More of Experience
by Sex, Age, and Teaching Specialization, 1977-78

	Male			Female			
Age	Elem	Sec	Spec Ed	Elem	Sec	Spec Ed	Total
40-44	161	295	9	316	98	21	900
45-49	374	738	26	693	236	63	2130
50-54	502	855	28	936	323	75	2719
55-59	275	546	11	1488	304	75	2699
60-64	101	188	4	1131	172	66	1662
65 +	14	26	2	198	27	9	276
Total	1427 (34.3%)	2648 (63.7%)	80 (1.9%)	4762 (76.4%)	1160 (18.6%)	309 (5%)	

Male Total 4155 (40%)

Female Total 6231 (60%)

Grand Total 10386

Appendix C

TABLE 1C

Group Created With Three Years Experience, Age 25, 1972-1977

Experience	3	4	5	6	7	8		
Age	25	26	27	28	29	30	N decline	%
Year	1972	1973	1974	1975	1976	1977	1972-77	
Category								
Male	757	676	618	588	549	516	241	31.8
Elementary	392	341	299	287	258	234		
Secondary	344	319	303	285	275	264		
Spec. Ed.	21	16	16	16	16	18		
Female	2174	1779	1480	1259	1064	946	1228	56.5
Elementary	1544	1258	1044	888	755	652		
Secondary	409	338	287	260	218	211		
Spec. Ed.	221	183	149	111	91	83		
Total	2931	2455	2098	1847	1613	1462	1469	50.1

TABLE 2C

Group Created With Five Years Experience, Age 30, 1972-1977

Experience	5	6	7	8	9	10		
Age	30	31	32	33	34	35	N decline	%
Year	1972	1973	1974	1975	1976	1977	1972-77	
Category								
Male	212	192	171	165	151	141	71	33.5
Elementary	87	76	70	68	59	52		
Secondary	119	111	96	93	87	83		
Spec. Ed.	6	5	5	4	5	6		
Female	199	181	173	160	155	153	46	23.1
Elementary	130	117	116	100	98	97		
Secondary	51	49	43	45	43	41		
Spec. Ed.	18	15	14	15	14	15		
Total	411	373	344	325	306	294	117	28.5

TABLE 3C

Group Created With Five Years Experience, Age 35, 1972-1977

Experience	5	6	7	8	9	10		
Age	35	36	37	38	39	40	N decline	%
Year	1972	1973	1974	1975	1976	1977	1972-77	
Category								
Male	32	29	29	25	24	25	7	21.9
Elementary	16	16	15	13	13	12		
Secondary	16	13	14	12	11	13		
Spec. Ed.	0	0	0	0	0	0		
Female	71	81	73	75	75	75	+ 4	+ 5.6
Elementary	55	60	54	53	56	56		
Secondary	12	15	15	17	14	14		
Spec. Ed.	4	6	4	5	5	5		
Total	103	110	102	100	99	100	3	2.9

TABLE 4C

Group Created With Ten Years Experience, Age 35, 1972-1977

Experience	10	11	12	13	14	15		
Age	35	36	37	38	39	40	N decline	%
Year	1972	1973	1974	1975	1976	1977	1972-77	
Category								
Male	88	79	77	78	80	71	17	19.3
Elementary	24	21	20	19	20	18		
Secondary	62	57	56	58	58	51		
Spec. Ed.	2	1	1	1	2	2		
Female	72	73	67	66	64	60	12	16.6
Elementary	57	56	52	51	51	47		
Secondary	11	11	9	8	8	8		
Spec. Ed.	4	6	6	7	5	5		
Total	160	152	144	144	144	131	29	18.1

TABLE 5C

Group Created With Ten Years Experience, Age 40, 1972-1977

Experience	10	11	12	13	14	15		
Age	40	41	42	43	44	45	N decline	%
Year	1972	1973	1974	1975	1976	1977	1972-77	
Category								
Male	31	28	27	27	31	31	0	0
Elementary	7	5	5	5	7	7		
Secondary	24	23	22	22	24	24		
Spec. Ed.	0	0	0	0	0	0		
Female	34	34	34	36	36	34	0	0
Elementary	26	25	25	27	27	27		
Secondary	7	7	7	7	7	5		
Spec. Ed.	1	2	2	2	2	2		
Total	65	62	61	63	67	65	0	0

TABLE 6C

Group Created With Fifteen Years Experience, Age 40, 1972-1977

Experience	15	16	17	18	19	20		
Age	40	41	42	43	44	45	N decline	%
Year	1972	1973	1974	1975	1976	1977	1972-77	
Category								
Male	75	73	78	75	73	69	6	8
Elementary	27	25	27	24	26	25		
Secondary	47	47	50	51	47	44		
Spec. Ed.	1	1	1	0	0	0		
Female	36	34	36	36	37	34	2	5.5
Elementary	24	22	25	25	22	21		
Secondary	11	11	11	11	12	12		
Spec. Ed.	1	1	0	0	1	1		
Total	111	107	114	111	110	103	8	7.2

TABLE 7C

Group Created With Ten Years Experience, Age 45, 1972-1977

Experience	10	11	12	13	14	15			
Age	45	46	47	48	49	50		N decline	%
Year	1972	1973	1974	1975	1976	1977	-	1972-77	
Category									
Male	14	14	11	10	9	7		7	50.0
Elementary	5	7	5	5	4	3			
Secondary	8	5	4	3	4	3			
Spec. Ed.	1	2	2	2	1	1			
Female	51	48	49	50	47	48		3	5.8
Elementary	41	38	38	40	38	38			
Secondary	7	7	8	8	7	8			
Spec. Ed.	3	3	3	2	2	2			
Total	65	62	60	60	56	55		10	15.3

TABLE 8C

Group Created With Fifteen Years Experience, Age 45, 1972-1977

Experience	15	16	17	18	19	20		
Age	45	46	47	48	49	50	N decline	%
Year	1972	1973	1974	1975	1976	1977	1972-77	
Category								
Male	23	23	24	23	21	21	2	8.7
Elementary	10	9	9	9	9	9		
Secondary	13	14	15	14	12	12		
Spec. Ed.	0	0	0	0	0	0		
Female	53	54	55	52	50	51	2	3.7
Elementary	38	40	41	40	37	36		
Secondary	7	6	6	5	5	6		
Spec. Ed.	8	8	8	7	8	9		
Total	76	77	79	75	71	72	4	5.3

TABLE 9C

Group Created With Twenty Years Experience, Age 45, 1972-1977

Experience	20	21	22	23	24	25		
Age	45	46	47	48	49	50	N decline	%
Year	1972	1973	1974	1975	1976	1977	1972-1977	
Category								
Male	41	43	41	41	39	41	0	0
Elementary	15	16	14	16	15	14		
Secondary	26	26	27	25	24	27		
Spec. Ed.	0	1	0	0	0	0		
Female	23	22	23	24	22	22	1	4.3
Elementary	17	15	16	17	15	15		
Secondary	5	6	6	6	6	6		
Spec. Ed.	1	1	1	1	1	1		
Total	64	65	64	65	61	63	1	1.5

TABLE 10C

Group Created With Twenty Years Experience, Age 50, 1972-1977

Experience	20	21	22	23	24	25		
Age	50	51	52	53	54	55	N decline	%
Year	1972	1973	1974	1975	1976	1977	1972-77	
Category								
Male	23	23	23	22	23	23	0	0
Elementary	8	7	7	7	9	10		
Secondary	15	16	16	15	14	13		
Spec. Ed.	0	0	0	0	0	0		
Female	27	25	25	24	26	25	2	7.4
Elementary	24	23	23	22	23	22		
Secondary	3	2	2	2	3	3		
Spec. Ed.	0	0	0	0	0	0		
Total	50	48	48	46	49	48	2	4.0

TABLE 11C

Group Created With Twenty-five Years Experience, Age 50, 1972-1977

Experience	25	26	27	28	29	30		
Age	50	51	52	53	54	55	N decline	%
Year	1972	1973	1974	1975	1976	1977	1972-77	
Category								
Male	19	19	16	17	17	16	3	15.8
Elementary	4	4	3	3	3	3		
Secondary	15	15	13	14	14	13		
Spec. Ed.	0	0	0	0	0	0		
Female	19	19	18	17	18	17	2	10.5
Elementary	15	15	15	14	15	14		
Secondary	3	3	3	3	3	3		
Spec. Ed.	1	1	0	0	0	0		
Total	38	38	34	34	35	33	5	13.2

TABLE 12C

Group Created With Twenty-five Years of Experience, Age 55, 1972-1977

Experience	25	26	27	28	29	30		
Age	55	56	57	58	59	60	N decline	%
Year	1972	1973	1974	1975	1976	1977	1972-77	
Category								
Male	11	9	9	8	6	5	6	54.5
Elementary	1	1	1	1	1	1		
Secondary	10	8	8	7	5	4		
Spec. Ed.	0	0	0	0	0	0		
Female	33	29	30	29	28	24	9	27.3
Elementary	28	25	25	25	23	20		
Secondary	5	4	5	4	4	3		
Spec. Ed.	0	0	0	0	1	1		
Total	44	38	39	37	34	29	15	34.1

TABLE 13C

Group Created With Thirty Years Experience, Age 55, 1972-1977

Experience	30	31	32	33	34	35		
Age	55	56	57	58	59	60	N decline	%
Year	1972	1973	1974	1975	1976	1977	1972-77	
Category								
Male	5	5	5	6	6	5	0	0
Elementary	4	4	4	4	4	3		
Secondary	1	1	1	2	2	2		
Spec. Ed.	0	0	0	0	0	0		
Female	19	18	17	15	16	11	8	42.1
Elementary	13	12	11	10	11	7		
Secondary	4	4	4	3	3	2		
Spec. Ed.	2	2	2	2	2	2		
Total	24	23	22	21	22	16	8	33.3

TABLE 14C

Group Created With Thirty Years Experience, Age 60, 1972-1977

Experience	30	31	32	33	34	35		
Age	60	61	62	63	64	65	N decline	%
Year	1972	1973	1974	1975	1976	1977	1972-77	
Category								
Male	3	0	1	0	0	0	3	100
Elementary	2	0	0	0	0	0		
Secondary	1	0	1	0	0	0		
Spec. Ed.	0	0	0	0	0	0		
Female	20	13	8	6	4	2	18	90
Elementary	19	10	6	5	3	2		
Secondary	1	3	2	1	1	0		
Spec. Ed.	0	0	0	0	0	0		
Total	23	13	9	6	4	2	21	91.3

TABLE 15C

Group Created With Thirty-five Years Experience, Age 60, 1972-1977

Experience	35	36	37	38	39	40		
Age	60	61	62	63	64	65	N	%
Year	1972	1973	1974	1975	1976	1977		
Category								
Male	2	2	1	0	0	0	2	100
Elementary	1	1	1	0	0	0		
Secondary	1	1	0	0	0	0		
Spec. Ed.	0	0	0	0	0	0		
Female	16	13	7	3	3	1	15	93.8
Elementary	12	11	5	1	1	1		
Secondary	3	2	2	2	2	0		
Spec. Ed.	1	0	0	0	0	0		
Total	18	15	8	3	3	1	17	94.4

Appendix D

TABLE 1D

Group Created With One Year Experience, Age 22, 1973-1977

Experience	1	2	3	4	5		
Age	22	23	24	25	26	N decline	%
Year	1973	1974	1975	1976	1977	1973-77	
Category							
Male	223	228	211	186	171	52	23.3
Elementary	122	122	114	101	91		
Secondary	90	93	85	76	70		
Spec. Ed.	11	13	12	9	10		
Female	964	994	913	789	689	275	28.5
Elementary	557	578	534	464	400		
Secondary	182	180	160	130	114		
Spec. Ed.	225	236	219	195	169		
Total	1187	1222	1124	975	854	333	28.1

TABLE 2D

Group Created With One Year Experience, Age 22, 1974-1977

Experience	1	2	3	4		
Age	22	23	24	25	N decline	%
Year	1974	1975	1976	1977	1974-77	
Category						
Male	157	149	122	112	45	28.7
Elementary	77	73	59	53		
Secondary	72	67	54	51		
Spec. Ed.	8	9	9	8		
Female	821	832	703	609	212	25.8
Elementary	500	487	409	358		
Secondary	149	150	125	102		
Spec. Ed.	172	195	169	149		
Total	978	981	825	721	257	26.3

TABLE 3D

Group Created With One Year Experience, Age 22, 1975-1977

Experience	1	2	3		
Age	22	23	24	N decline	%
Year	1975	1976	1977	1975-77	
Category					
Male	129	119	102	27	20.9
Elementary	56	55	45		
Secondary	63	54	47		
Spec. Ed.	10	10	10		
Female	557	563	501	56	10.1
Elementary	291	288	260		
Secondary	136	135	106		
Spec. Ed.	130	140	135		
Total	686	682	603	83	12.1